FEBOTAN

PATE: 01/30/2001

PIME: 10:47:56

FEBOTAN

FEBOT 1648 DATE: 01/30/2001 TIME: 10:47:56

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,239

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\01302001\1509239.raw

4	<1.10>	APPLICANT: Bruck, Claudine	
5		Godart, Stephane Andre Georges	
6		Marc-Hand, Martine	
	<120>	TITLE OF INVENTION: Fusion Proteins Comprising HIV-1 TAT	
9	-7.00	and/or Nef Proteins	
		FILE REFERENCE: B45110	
		CURRENT APPLICATION NUMBER: 09/509,239 CURRENT FILING DATE: 2000-03-23	
		PRIOR APPLICATION NUMBER: PCT/EP98/06040	
		PRIOR FILING DATE: 1998-09-17	
		PRIOR APPLICATION NUMBER: GB 9720585.0	
		PRIOR FILING DATE: 1997-09-26	
22	<160>	NUMBER OF SEQ ID NOS: 27	
24	<170>	SOFTWARE: FastSEQ for Windows Version 3.0	
26	<210>	SEQ ID NO: 1	
		LENGTH: 23	
		TYPE: DNA	
		ORGANISM: Pichia pastoris	
		SEQUENCE: 1	23
		ccatg ggtggcaagt ggt SEQ ID NO: 2	23
		LENGTH: 23	
		TYPE: DNA	
		ORGANISM: Pichia pastoris	
39	<400>	SEQUENCE: 2	
40	cyąct	actag tgcagttett gaa	23
		SEQ ID NO: 3	
		LENGTH: 24	
		TYPE: DNA	
		ORGANISM: Pichia pastoris SEQUENCE: 3	
		actag tgagecagta gate	24
	-	SEQ ID NO: 4	24
		LENGTH: 24	
52	<212>	TYPE: DNA	
53	<213>	ORGANISM: Pichia pastoris	
55	<400>	SEQUENCE: 4	
56		actag titecticgg goot	24
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		LENGTH: 23	
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		SEQUENCE: 5	
		ccatg gagccagtag atc	23
		SEQ ID NO: 6	
		LENGTH: 441	
68	<212>	TYPE: DNA	

RAW SEQUENCE LISTING DATE: 01/30/2001 PATENT APPLICATION: US/09/509,239 TIME: 10:47:56

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69 <213> ORGANISM: Pichia pastoris
71 <400> SEQUENCE: 6
72 atggatecaa aaactttage cetttettta ttagcagetg gegtaetage aggttgtage
                                                                               60
    agccatteat caaatatgge gaatacecaa atgaaateag acaaaateat tattgeteae
74 cgtggtgeta geggttattt accagageat acgttagaat etaaageaet tgettttgea
                                                                              180
75 caacaggetg attatttaga gcaagattta gcaatgacta aggatggtcy tttagtggtt
                                                                              240
76
    atteaegate actititaga tygettyaet gatyttyega aaaaatteee acateyteat
                                                                              300
   ogtaaagatg geegttaeta tgteategae tttaeettaa aagaaattea aagtttagaa
    atgacagaaa actttgaaac catggccacg tgtgatcaga gctcaactag tggccaccat
                                                                              420
79 caccatcacc attaatctag a
                                                                              441
81 <210> SEQ ID NO: 7
82 <211> LENGTH: 144
83 <212> TYPE: PRT
84 <213> ORGANISM: Pichia pastoris
86 <400> SEQUENCE: 7
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88
    1
                     5
                                         10
    Ala Gly Cys Ser Ser His Ser Ser Asn Met Ala Asn Thr Gln Met Lys 20 25 30
89
90
    Ser Asp Lys Ile Ile Ala His Arg Gly Ala Ser Gly Tyr Leu Pro 35 \hspace{1cm} 40 \hspace{1cm} 45
    Glu His Thr Leu Glu Ser Lys Ala Leu Ala Phe Ala Gln Gln Ala Asp 50 55 60
93
94
    Tyr Leu Glu Gln Asp Leu Ala Met Thr Lys Asp Gly Arg Leu Val Val 65 70 75 80
96
   Ile His Asp His Phe Leu Asp Gly Leu Thr Asp Val Ala Lys Lys Phe 85 90 95
97
98
99
    Pro His Arg His Arg Lys Asp Gly Arg Tyr Tyr Val Ile Asp Phe Thr 100 \, 105 \, 110 \,
100
    Leu Lys Glu Ile Gln Ser Leu Glu Met Thr Glu Asn Phe Glu Thr Met 115 120 125
101
102
     Ala Thr Cys Asp Gln Ser Ser Thr Ser Gly His His His His His
104
       130
                            135
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 648
108 <212> TYPE: DNA
109 <213> ORGANISM: Pichia pastoris
111 <400> SEQUENCE: 8
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113 agacgagetg agecageage agatggggtg ggageageat etegagaeet ggaaaaacat
                                                                               120
     ggagcaatca caagtagcaa tacagcagct accaatgctg cttgtgcctg gctagaagca
                                                                               180
     caagaggagg aggaggtggg ttttccagtc acacctcagg tacctttaag accaatgact
                                                                               240
115
                                                                               300
116 tacaaggcag ctgtagatct tagccacttt ttaaaagaaa aggggggact ggaagggcta
1.17
     atteacteec aacgaagaca agatateett gatetgtgga tetaceacac acaaggetac
                                                                               360
    tteeetgatt ggeagaacta cacaceaggg ceaggggtea gatatecaet gacetttgga
                                                                               420
                                                                               480
119
     tggtgctaca agctagtacc agttgagcca gataaggtag aagaggccaa taaaggagag
                                                                               540
120 aacaccaget tgttacacce tgtgageetg catggaatgg atgaccetga gagagaagtg
121 ttagagtgga ggtttgacag ccgcctagca tttcatcacg tggcccgaga gctgcatccg
                                                                               600
122 gagtactica agaactgcac tagtggccac catcaccatc accattaa
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 DATE: 01/30/2001

 PATENT APPLICATION: US/09/509,239
 TIME: 10:47:56

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\01302001\1509239.raw

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125 <211> LENGTH: 215
126 <212> TYPE: PRT
127 <213> ORGANISM: Pichia pastoris
129 <400> SEQUENCE: 9
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     1
                   5
                                    10
                                                          15
132
    Arg Glu Arg Met Arg Arg Ala Glu Pro Ala Ala Asp Gly Val Gly Ala
133
       20
                         25
    Ala Ser Arg Asp Leu Glu Lys His Gly Ala Ile Thr Ser Ser Asn Thr 35 40 45
134
135
     Ala Ala Thr Asn Ala Ala Cys Ala Trp Leu Glu Ala Gln Glu Glu Glu 50 \phantom{00}
136
137
    Glu Val Gly Phe Pro Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr 65 70 70 80
139
    Tyr Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly
140
141
           85
                            90
    Leu Glu Gly Leu Ile His Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu
100 105 110
142
          1.00
143
    Trp Ile Tyr His Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr 115 120 125
144
145
    Pro Gly Pro Gly Val Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys
130 135 140
1.47
    Leu Val Pro Val Glu Pro Asp Lys Val Glu Glu Ala Asn Lys Gly Glu
145 150 155 160
148
149
    145 150
150
    Asn Thr Ser Leu Leu His Pro Val Ser Leu His Gly Met Asp Asp Pro
151
      165 170 1.75
    Glu Arg Glu Val Leu Glu Trp Arg Phe Asp Ser Arg Leu Ala Phe His
1.52
     180 185 190
153
154
    His Val Ala Arg Glu Leu His Pro Glu Tyr Phe Lys Asn Cys Thr Ser
155
     195
                              200
    Gly His His His His His
1.56
157
     210
                           215
159 <210> SEQ ID NO: 10
160 <21.1> LENGTH: 288
161 <212> TYPE: DNA
162 <213> ORGANISM: Pichia pastoris
164 <400> SEQUENCE: 10
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166 gettgtacca attgctattg taaaaagtgt tgctttcatt gccaagtttg tttcataaca
                                                                       1.20
167 aaageettag geateteeta tggeaggaag aageggagae agegaegaag aceteeteaa
                                                                       180
168 ggcagteaga eteateaagt ttetetatea aageaaceea eeteecaate eegagggae
                                                                       240
169 ccgacaggec cgaaggaaac tagtggccac catcaccatc accattaa
171 <210> SEQ ID NO: 11
172 <211> LENGTH: 95
173 <212> TYPE: PRT
174 <213> ORGANISM: Pichia pastoris
176 <400> SEQUENCE: 11
177 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
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DATE: 01/30/2001 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/509,239 TIME: 10:47:56

Input Set : A:\seqlist.txt Output Set: N:\CRF3\01302001\I509239.raw

178 Gin Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe 20 25 30 179 180 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly 35 40 45 181 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr . 50 55 60184 185 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg'Gly Asp 65 70 75 Pro Thr Gly Pro Lys Glu Thr Ser Gly His His His His His His Bis 85 90 95

190 <210> SEQ ID NO: 12 191 <211> LENGTH: 909 192 <212> TYPE: DNA

193 <213> ORGANISM: Pichia pastoris

195 <400> SEQUENCE: 12 196 atgggtggca agtggtcaaa aagtagtgtg gttggatggc ctactgtaag ggaaagaatg 60 120 197 agacgagetg agecageage agatggggtg ggageageat etegagaeet ggaaaaacat 198 ggagcaatca caagtagcaa tacagcagct accaatgctg cttgtgcctg gctagaagca 1.80 199 caagaggagg aggaggtggg ttttccagtc acacctcagg tacctttaag accaatgact 240 tacaaggeag etgtagatet tageeacttt ttaaaaagaaa aggggggaet ggaagggeta 300 201 attractece aacgaagaca agatateett gatetgtgga tetaccacae acaaggetae 202 ttccctgatt ggcagaacta cacaccaggg ccaggggtca gatatccact gacctttgga 420 203 tggtgctaca agctagtacc agttgagcca gataaggtag aagaggccaa taaaggagag 480 204 aacaccaget tyttacaccc tytgagcety catggaatgg atgaccetga gagagaagtg 540 ttagagtgga ggtttgacag cegectagea tttcatcaeg tggccegaga getgeateeg 600 206 gagtactica agaactgcac tagtgagcca glagatecta gactagagcc ctggaagcat 720 207 ccaggaagtc agcctaaaac tgcttgtacc aattgctatt gtaaaaagtg ttgctttcat 208 tgccaagttt gtttcataac aaaagcctta ggcatctcct atggcaggaa gaagcggaga 780 209 cagogacgaa gacctootoa aggeagtoag acteatoaag titototato aaageaacoo 840 210 acctoccaat eccgagggga eccgacagge ecgaaggaaa etagtggeea ecateaceat 900 211 caccattaa 909

213 <210> SEQ ID NO: 13 214 <211> LENGTH: 302

215 <212> TYPE: PRT

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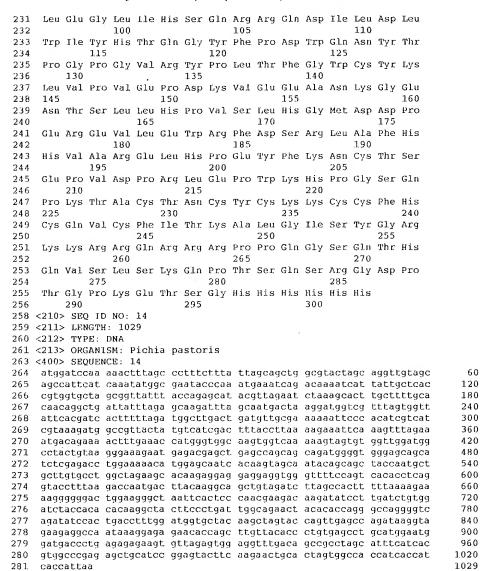
216 <213> ORGANISM: Pichia pastoris '

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Tyr Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly

RAW SEQUENCE LISTING DATE: 01/30/2001
PATENT APPLICATION: US/09/509,239 TIME: 10:47:56

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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/509,239 DATE: 01/30/2001 TIME: 10:47:57

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\01302001\I509239.raw